

breakout ABSTRACT

Abstract No. 1

TITLE

DEVELOPMENT AND VISUALIZATION OF COMMUNITY VULNERABILITY INDICATORS FOR TRACKING

TRACK

Collaboration/Diversity/Coordination

OBJECTIVES

Participants will learn about proposed community vulnerability indicators which may be important to track which may have profound interactions with environmental exposures to predict health outcomes.

SUMMARY

Recent attention has been given to health disparities, especially among low-income and racial and ethnic minority neighborhoods, which may be related to disproportionate burdens of environmental exposures from agents such as pesticides, traffic exhaust, and toxic air contaminants. In addition, vulnerability factors such as stress, lack of community resources, and other structural factors may play a role in increasing susceptibility to the effects of environmental hazards. Scientific evidence suggests the interaction between environmental hazards and community vulnerability factors can have profound, directly measurable effects on health outcomes, particularly adding to the burden of illness among these communities. There is little consensus, however, on the best approaches to quantify these factors, or how they might be incorporated into an EPHTN. Building on a funded project between CEHTP, U.S. EPA Region 9, and the UC Santa Cruz to examine indicators of community demographics, civic engagement, and measures of segregation, we will discuss these and additional measures reflecting housing conditions, social stressors, violent crime, and availability of health services. We will also demonstrate how the use of Info-Alameda, a web-enabled, interactive visual user interface can increase the capacity of communities to examine possible connections between environmentally-related chronic disease, community vulnerabilities, and environmental exposures. We will assess the benefits, limitations, and costs of this type of community data warehousing system and explore how this approach may be applied to other diseases and environmental hazards.

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